DISINFECTING COMPOSITIONS AND METHODS OF MAKING AND USING SAME

Abstract of the Disclosure

The present invention provides a composition, comprising: greater than about 0.1% by weight hydrogen peroxide; an aromatic acid component; surfactant; optionally, a solvent; and a carrier. The composition of the invention is useful as a disinfecting composition for killing microorganisms such as bacterium (including *Mycobacterium*), spores and fungi. The composition provides a pathogenic bacteria kill rate of 99.9% in about 30 seconds when bacteria are exposed to the composition and is effective in providing a *Mycobacterium* kill of 10⁶ with two minutes or less. Moreover, the compositions of the invention are generally more resistant to catalase deactivation than, for example, an aqueous solution of hydrogen peroxide. The concentration of hydrogen peroxide within the composition may range from about 1% by weight to about 7% by weight and the concentration of aromatic acid component may range from about 0.1% by weight to about 5% by weight. The invention also provides a method for disinfection of a substrate utilizing the composition. The composition of the invention may be used in the foregoing method on a medical instrument, such as an endoscope or the like. Applying the compositions to a substrate may be accomplished in any of a variety of application methods such as by roll coating, dipping, spraying, or rotational tumbling. The composition may be applied to the substrate for a period of time ranging from about 30 seconds to about ten minutes. In this aspect, the invention can further comprise drying the substrate after removing the composition.